

## ABSTRACT

2 A head set speaker and stereo radio playing device exhibits improved improved  
3 harmonics and acoustic fidelity. A resilient and flexible headpiece is sized to fit behind the  
4 head of the user. Right and left device enclosures are carried by the ends of the headpiece,  
5 and are aerodynamic shaped to minimize wind whistle which may result when the head set  
6 is worn while moving rapidly. Right and left behind the ear flanges extend downwardly from  
7 a position adjacent to the ends of the headpiece, and aid in the positioning of the right and  
8 left ear device enclosures. In a typical application, the device enclosures are positioned  
9 immediately forward of the user's ears, allowing ambient sound to be heard. A speaker  
10 assembly and a removable battery assembly are carried within each device enclosure. The  
11 speakers are oriented within the device enclosures with the speaker magnet directed to, and  
12 in contact with, the head of the listener. This achieves two interrelated and significant  
13 structural and electronic advantages. First, sound fidelity is improved by using sound  
14 reflecting walls and baffles to redirect the sound. And second, antenna functionality is  
15 improved by attaching an antenna input to the speaker magnet which is in contact with the  
16 listener's skin, and there by connecting the listener's body to the antenna. A charging unit is  
17 sized to receive both battery assemblies simultaneously. A circuit card carried within one of  
18 the device enclosures contains a stereo radio circuit. On/off, volume up, volume down, scan  
19 and reset buttons carried by the device enclosures are in electrical communication with the  
20 circuit card, and allow control over radio functionality.